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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/476,358	01/03/2000	PAUL SMITH	PM-265540	7714
43569	7590	11/05/2004	EXAMINER PARKER, KENNETH	
MAYER, BROWN, ROWE & MAW LLP 1909 K STREET, N.W. WASHINGTON, DC 20006			ART UNIT 2871	PAPER NUMBER

DATE MAILED: 11/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Supplemental
Notice of Allowability**

Application No.

09/476,358

Examiner

Kenneth A Parker

Applicant(s)

SMITH ET AL.

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to ____.
2. ☒ The allowed claim(s) is/are 33,34,36-39,41-55,57 and 58.
3. ☐ The drawings filed on ____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date ____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 11/02/04.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other ____.

Kenneth A Parker
Primary Examiner
Art Unit: 2871

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EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Paul Sharer on 8/27/2004.

The claims have been replaced by the following claims (here below listed in their entirety):

33. (Currently Amended) An optoelectronic display device of high brightness and high contrast comprising:

at least two thin photoluminescent layers having unequal photoemission or absorption spectra or both, wherein said at least two thin photoluminescent layers are characterized in a high degree of polarization in their absorption and are characterized in an emission which is either polarized or not, wherein said layers have a thickness of less than about 1 mm and a dichroic ratio in their absorption of more than about 5, and said thin photoluminescent layers comprising one or more at least partially conjugated oligomers or one or more at least partially conjugated polymers or both; and

wherein said photoluminescent layers are located between a viewer and an electrooptical light valve; or said electrooptical light valve is located between the viewer and said photoluminescent layers; or said photoluminescent layers are inside said electrooptical light valve.

34. (Previously presented) An optoelectronic display device according to claim 33, wherein said photoluminescent layers have a dichroic ratio in its emission of more than about 5.

35. (Cancelled)

36. (Currently amended) A display device according to claim ~~33~~ 35, wherein said electrooptical light valve includes a liquid crystal cell having a liquid crystal layer which is electrically switchable.

37. (Previously presented) A display device according to claim 33, wherein said device comprises a polarizer selected from the group consisting of absorbing polarizer, scattering polarizer and reflecting polarizer,
said polarizer being located between said photoluminescent layers and the viewer, or said photoluminescent layers being located between the viewer and said polarizer.
38. (Currently amended) A display device according to claim ~~33~~ 35, wherein said photoluminescent layers are located between the viewer and said electrooptical light valve.
39. (Currently amended) A display device according to claim ~~33~~ 35, wherein said electrooptical light valve is located between the viewer and said photoluminescent layers.
40. (Cancelled).
41. (Previously presented) A display device according to claim 33, wherein said thin photoluminescent layers have a thickness of less than 300 μm .
42. (Previously presented) A display device according to claim 33, wherein said thin photoluminescent layers have a thickness of less than 50 μm .
43. (Previously presented) A display device according to claim 33, wherein said thin photoluminescent layers have a thickness of less than 10 μm .
44. (Previously presented) A display device according to claim 33, wherein said thin photoluminescent layers have a dichroic ratio in their absorption of more than 10.
45. (Previously presented) A display device according to claim 33, wherein said thin photoluminescent layers have a dichroic ratio in their absorption of more than 20.
46. (Previously presented) A display device according to claim 33, wherein said thin photoluminescent layers have a dichroic ratio in their emission of more than 15.

47. (Previously presented) A display device according to claim 33, wherein said thin photoluminescent layers have a dichroic ratio in their emission of more than 35.

48. (Previously presented) An optoelectronic display device of high brightness and high contrast comprising at least one thin photoluminescent layer that is characterized in a high degree of polarization in its absorption and that is characterized in an emission which is either polarized or not, wherein said layer has a thickness of less than about 1 mm and a dichroic ratio in its absorption of more than about 5, and

said thin photoluminescent layer comprises one or more at least partially conjugated oligomers or one or more at least partially conjugated polymers or both, wherein said display device additionally comprises at least one electrooptical light valve, said photoluminescent layer being located inside said electrooptical light valve.

49. (Previously presented) A display device according to claim 48, wherein said thin photoluminescent layer is located inside said electrooptical light valve and acts as orientation layer.

50. (Previously presented) A display device according to claim 33, wherein said thin photoluminescent layers are patterned.

51. (Previously presented) A display device according to claim 33 that is characterized in that said device comprises multiple elements, pixels or arrays thereof of said photoluminescent layers.

52. (Currently amended) A display device according to claim ~~33~~ 35 that is characterized in that said device comprises multiple electrooptical light valves.

53. (Previously presented) A display device according to claim 33, wherein said display device further comprises a light source and wherein said light source is characterized in that its emission spectrum overlaps with the absorption spectrum of said photoluminescent layers.

54. (Previously presented) A display device according to claim 33 that additionally comprises at least one dichroic mirror, said photoluminescent layers being located between said at least one dichroic mirror and the viewer.

55. (Previously presented) A display device according to claim 33, wherein said thin photoluminescent layers are obtained by a technique selected from the group consisting of tensile orientation, oriented growth, friction, photo-induced alignment and alignment in electric, magnetic and flow fields or combinations thereof, of photoluminescent substances.

56. (Cancelled).

57. (Previously presented) A display device according to claim 33, wherein said oligomers or polymers comprise one or more unsubstituted or substituted phenyleneethynylene moieties wherein said moieties may be the same or different at each occurrence.

58. (Previously presented) A display device according to claim 33, wherein said device has a viewing angle of 160 degrees or more or a brightness of 50 cd/m² or more, or both.

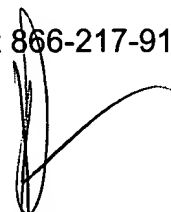
59-64. (Cancelled).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth A Parker whose telephone number is 571-272-2298. The examiner can normally be reached on M-F 10:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kenneth A Parker
Primary Examiner
Art Unit 2871